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Awareness & utilization of Janani Shishu Suraksha Karyakram (JSSK) in Western Part Of India: Quantitative Snap Shot Study

[1]Dr. Billav Rojasara: [2]Dr. Mittal Rathod: [3]Dr.Mehul Kaliya. [4]Dr. Vishakha Dabhi, [5]Dr. Naresh Makwana, [6]Dr. Dipesh V. Parmar:

[1,2]Post MD Tutor. [3,4]Assistant Professor. [5]Associate Professor. [6]Professor & Head ,
[1,2,5,6]Department of Community Medicine,
[5,6]Shree M P Shah Medical college, Jamnagar, Gujarat, India.
[1]NHL Medical College, Ahmedabad, Gujarat, India.
[2]P.D.U. GMC, Rajkot, Gujarat, India.
[3]Department of Medicine, AIIMS, Rajkot, Gujarat, India
[4]Dept. of Ophthalmology, Nootan Medical college & Research centre, Visnagar

***Corresponding Author:**
Dr. Mittal Rathod
Post MD Tutor, Community Medicine Dept.,
P.D.U. GOVT. Medical College,Rajkot, Gujarat, India
Dr.Billav Rojasara
Post MD Tutor, Community Medicine Dept.,
[1]NHL Medical College, Ahmedabad, Gujarat, India.

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Abstract

Introduction: Government of India has launched new initiative JANANI SHISHU SURAKSHA KARYAKRAM (JSSK) on 1st June 2011 to assure free service to all pregnant women and sick neonates accessing public health institutions. The scheme envisages free and cashless service to pregnant women including normal deliveries and caesarean operations and treatment of sick infant in all government health institutions across the state/UT. Thus it is expected to have fair utilization by a community.

Objective: To assess Awareness & utilization of Janani Shishu Suraksha Karyakram (JSSK) in and find out any association with sociodemographic variables.

Methodology: Out of total 400 study participants, 200 participants were selected from tertiary health care level from women who attending well baby clinic and remaining 200 cases were selected from primary and secondary health care level (PHC, CHC).

Results: After implementation of JSSK, number of institutional deliveries has significantly increased. But the awareness was less. The difference between the education of beneficiary & Socioeconoc class and awareness about JSSK was found to be significant statistically.

Keywords: NIL

Introduction

Encouraging the pregnant women to deliver in health centers/ institutions and for reducing infant and maternal mortality has been one of the core strategies of Janani Suraksha Yojana and Janani Shishu Suraksha Karyakram. The rate of institutional deliveries as per the Directorate of Health Science (2002-04) was only 41.5 percent. The national population policy (2000-2010) aims to achieve overall 80 percent institutional deliveries by 2010.

The National Rural Health Mission envisages reducing maternal mortality and Infant mortality rate to 100 per 100,000 live births and 30 per 1000 live births by 2012, respectively (1).

Reducing the maternal and infant mortality is a key goal of reproductive and child health programme under the national rural health mission (NRHM) (2).

Government of India has launched new initiative JANANI SHISHU SURAKSHA KARYAKRAM (JSSK) on 1st June 2011 to assure free service to all pregnant women and sick neonates accessing public health institutions. The scheme envisages free and cashless service to pregnant women including normal deliveries and caesarean operations and treatment of sick infant in all government health institutions across the state/UT(2) . Entitlements would include free drugs and consumables, free diagnostics, free blood wherever required, and free diet for the duration of a woman's stay in the facility, expected to be three days in case of normal delivery and seven in case of a caesarean section. Similar entitlements have been put in place for all sick newborns accessing public health institutions for health care till 30 days after birth. They would also be entitled to free treatment besides free transport, both ways and between facilities in case of a referral (2).

Objective: To assess Awareness & utilization of Janani Shishu Suraksha Karyakram (JSSK) in and find out any association with sociodemographic variables.

Methodology: the present assessment study employed quantitative research methodology in order to collect data from the beneficiaries regarding Janani Shishu Suraksha Karyakram. The study was carried out in rural as well as in urban area of study district. It was a community and facility based observational cross-sectional study for the period of one year.

Sample size estimation: a total of 400 sample was calculated using a formula of n=4pq/l2 [(3),] where p = 69.3 %(prevalence of interest = percentage of women who had institutional delivery [(4)] q = 1-p (30.7%) and l = allowable error considering 5% as an absolute one, which came to 374 ,considering about 10% non-response rate & it was rounded to 400.

Sample selection/technique: out of total 400 study participants, 200 participants were selected from tertiary health care level from women who attending well baby clinic and remaining 200 cases were selected from primary and secondary health care level (PHC, CHC). Among them 100 participants were selected randomly from four blocks and remaining 100 study participants were selected from total 08 PHC from above four block were selected randomly (two PHC per block). Study was carried out by identifying beneficiary from different health care functionary level and were be enquired about the utilization of various benefits provided under jssk. Study participants were assessed on the basis of all maternal benefits received at health care institution. Data were collected in predesigned and pretested Performa through pilot testing on about 20 women. The data of pilot study was not included for further analysis. The study was carried out by undertaking house to house visits of the area in rural area.

Inclusion criteria: women who delivered in last one year.

Exclusion criteria: antenatal mothers, mothers with twin's delivery

Statistical Analysis: the data entry was done using Epi info version 3.5.4 and data analysis was done using SPSS version 20 and in Microsoft office excel 2007 and med calc version 16.8.4 chi-square test was applied to test the relationship. A p-value < 0.05 was deemed statistically significant, p < 0.01 as highly significant (hs).

Ethical Approval: ethical approval was taken before the commencement of the study from the ethical committee of the concerned institution. Firstly, the participants of the study were explained in details about the purpose of the study and then their consent was taken before taking their response for study. They were assured of the confidentiality of their responses by the investigator.

Social classification was done on the basis of modified Prasad's classification which was modified according to aicpi-iw (all India consumer price index-industrial workers) of the year may- 2016 using cpi-iw 19. **Statistical analysis**: data were entered into excel sheet and analyzed by using software SPSS version 20.0. (IBM corp., Armonk, New York, 2010) categorical values were expressed in percentage with 95% ci when appropriate. Continuous variables were expressed as mean with standard deviation (SD) or

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median with interquartile range (iqr) after checking for the normality. **Protection of the human participants**: institutional ethics committee clearance was obtained . Informed consent was obtained from all the participants.

Results:

Table 1 Socio-demographic and ante-natal profile of mothers attending a secondary-level government hospital

Variable	**Frequency (%)**	**Variable**	**Frequency (%)**
Age group		**Age at marriage**	
18 to 25 year	255 (63.75%)	Less than 18	28 (7%)
More than 25 year	145 (36.25%)	18 or more than 18	372 (93%)
Caste		**Socioeconomic Class**	
General	49 (12.25%)	Class ii (3139-6276) upper middle	21 (5.25%)
OBC	256 (64%)	Class iii (1883-3138) lower middle	212 (53%)
SC	88 (22%)	Class iv (942-1882) upper lower	145 (36.25%)
St	7 (1.75%)	Class v (<942) lower	22 (5.5%)
Religion		**Occupation**	
Hindu	291 (72.75%)	Housewife	391 (97.75)
Muslim	109 (27.25%)	Employer	9 (2.25)
Education		**Occupation of husband**	
Graduate and above	7 (1.75%)	Clerical job/shop	15 (3.75%)
Secondary & Intermediate	37 (9.25%)	Owner/farmer	18 (4.5%)
Middle school	26 (6.5%)	Semi-professional	6 (1.5%)
Primary	209 (52.25%)	Skilled worker	10 (2.5%)
Illiterate	121 (30.5%)	Unskilled worker	351 (87.75%)
Place of delivery		**Type of family**	
PHC	15 (3.75%)	Joint family	219 54.75
CHC	54 (13.5%)	Nuclear family	125 31.25
District /sub district hospital	331 (82.75%)	Three generation family	56 14
Family size		**Any card**	
1-5	233 (58.25%)	BPL card	63 (15.75%)

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More than 5	167 41.75	RSBY card	66 (16.5%)
Type of delivery		**Parity**	
Normal delivery	313 (78.25%)	Primi	162 (40.5%)
Caesarean section	87 (21.75%)	Multi	238 (59.5%)

Majority i.e. 63.75% beneficiaries were found to be the age group of 18-25 with Mean age was 24.87(±3.934) years with minimum age 19 years and maximum age 39 year. 7% beneficiaries were married under the age of 18 years and 93% of beneficiaries were married above the age of 18 years with mean age of marriage was 19.13(1.523) year with minimum age was15 year and maximum age was 28 year. 72.75% were Hindus. 52.25% beneficiary had education up to primary education.

64% of the participants belonged to OBC category followed by 22% were belongs to SC category and 12.25% belongs to General category and remaining 1.75% belongs to ST category. 97.75% were housewife while 2.25% were employers which include any type of work including laborer, self-employed and other working women.

52% Husband of beneficiary had taken education up to primary education while 25.25% husband of beneficiary had not taken even formal education (illiterate). In this present study, most of husbands of beneficiary were unskilled worker 87.75%. 58.25% women had a family member of 01 to 05 with mean number of family member was.31 with minimum number of 02 members and maximum number of 20 members. 54.75% study participants were belongs to joint family while 3.25% beneficiaries were belongs to Nuclear family and rest of 14% study participants were belongs to three generation family.

As per modified B J Prasad's classification may 2016, most of study participants 53% were found in CLASS III (LOWER MIDDLE); while 36.25% were found in CLASS IV (UPPER LOWER); followed by 5.5% and 5.25% were found in CLASS V (LOWER) and CLASS II (UPPER MIDDLE) respectively.

15.75% were BPL card holders whereas 16.5 % were not RSBY card holder. 100% study participants were used various antenatal services i.e., ANC visit, Injection Tetanus Toxoid (INJ. TT) and Tab. Iron and Folic Acid. 82.75% of delivery was conducted in district/sub district hospital followed by 13.5% in CHC and 3.75% in PHC level. Out of 400 deliveries 78.25% deliveries were Normal Deliveries and remaining 21.75% deliveries were Caesarean section. In the present study, 59.5% mothers were Multi-gravid while 40.5% mothers were Primi- gravid.

75.75% were stay duration in institute was less than 03 day while 24.25% study participants were have stay duration in institute were 03 days or more than 03 days.

Table: 2 distribution of beneficiary according to awareness about JSSK & its various services of mother component

Know about	**Yes (%)**	**No (%)**
JSSK	26(6.5%)	374(93.5%)
Free delivery/CS	26(6.5%)	374(93.5%)
Free drugs/consumables	25(6.25%)	375(93.75%)
Free diagnostic test	23(5.75%)	377(94.25%)
Free diet	24(6%)	376(94%)
Free blood	24(6%)	376(94%)
Free transport	23(5.75%)	377(94.25%)

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Only 26(6.5%) were aware about JSSK with regarding the source of information; the most common source of information was from health personnel. Out of 26 all of them were not fully aware about all various services or entitlements of maternal component of JSSK. Out of 400 only 26(6.5%) were aware about free delivery/caesarean section; while only 25(6.25%) were aware about free drugs/consumables to mother while only 24(6%) were aware about free provision of blood and free diet for mother and only 23(5.75%) were aware about free diagnostic test and free transport service for mother.

Table: 3 associations between awareness of JSSK and other sociodemographic profile:

Variable	AWARE ABOUT JSSK		Statistics
	Yes	No	
Age			
18 TO 25 YEAR	19(7.45%)	236(92.55%)	Chi-square = 1.047, P = 0.307, df = 1
MORE THAN 25 YEAR	7(4.82%)	138(95.18%)	
Age at Marriage			
18 OR MORE THAN 18 YEAR	22(5.91%)	350(94.09%)	Chi-square = 2.995, P = 0.0835, df = 1
LESS THAN 18 YEAR	4(14.28%)	24(85.72%)	
Religion			
HINDU	20(6.87%)	271(93.13%)	Chi-square = 0.244, P = 0.621, df = 1
MUSLIM	6(5.50%)	103(94.50%)	
Caste			
GENERAL	3(6.12%)	46(93.88%)	Chi-square = 1.643, P = 0.649, df = 3
OBC	15((5.86%)	241(94.14%)	
SC	8(8%)	80(92%)	
ST	0	7(100%)	
Education			
GRADUATE AND ABOVE	1(14.29%)	6(85.71%)	Chi-square = 18.495, P = 0.0024, df = 5)
INTERMEDIATE	0	2(100%)	
SECONDARY	2(5.71%)	33(94.29%)	
MIDDLE SCHOOL	6(23.08%)	20(76.92%)	
PRIMARY	6(2.87%)	203(97.13%)	
ILLITERATE	11(9.09%)	110(90.91%)	
Occupation			
HOUSEWIFE	26(6.65%)	365(93.35%)	Chi-square = 0.638, P

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EMPLOYER	0	9(100%)	= 0.424, df = 1
SE Class			
CLASS II (3139 TO 6276)	1(4.76%)	20(95.24%)	Chi-square = 21.873, P = 0.0001, df = 3)
CLASS III (1883 TO 3138)	6(2.83%)	206(97.17%)	
CLASS IV (942 TO 1882)	13(8.97%)	132(91.03%)	
%) CLASS V (BELOW 942)	6(27.27%)	16(72.73%)	
Parity			
MULTI	18(7.56%)	220(92.44%)	Chi-square = 1.09, P = 0.296, df = 3
PRIMI	8(4.94%)	154(95.06%)	

Women in the age group of 18- 25 years were relatively more aware about JSSK i.e. 7.45% as compared to 4.82% women of more than 25 years. For a variable Age at marriage, age group of less than 18 years were relatively more aware about JSSK i.e. 14.28% as compared to 5.91% women of age group 18 or more than 18 years. It was observed in present study that Hindu women were relatively more aware about JSSK i.e. 6.87% as compared to 5.50% Muslim women. Women belongs to SC category were relatively more aware about JSSK than other groups. But the difference between the age group and awareness about JSSK was not found to be significant statistically. Women who were housewife were more aware about JSSK i.e.6.65% as compared to women who were employer. But there was no statistical significant difference between above stated variables.

women who studied up to middle school were more aware about JSSK i.e. 23.08% as followed by 14.29% women who were taken education up to graduation and above followed by 9.09% have no taken any formal education and 5.71% were taken education up to secondary education level and 2.87% had taken up to primary education level; The difference between the education of beneficiary and awareness about JSSK was found to be significant statistically (Chi-square = 18.495, P = 0.0024, df = 5).

It was observed in present study that women in the socioeconomic CLASS V were more aware about JSSK i.e. 27.27% followed by 8.97% women in socioeconomic CLASS IV and 4.76% women in socioeconomic CLASS II and 2.83% women in socioeconomic CLASS III.; the difference between the socioeconomic class and awareness about JSSK was found to be highly significant statistically (Chi-square = 21.873, P = 0.0001, df = 3). Most of women who were belongs to lower socioeconomic status (CLASS IV & CLASS V) were residing in rural areas where there ASHA worker or other health worker working more actively and from there they got information about JSSK as compared to women who belongs to middle (CLASS II & CLASS III) socioeconomic class and residing at rural/urban area where they not actively involved in activity of health worker or there were no actively working health worker.

It was observed in present study that women who were multi gravid during last pregnancy were more aware about JSSK i.e.7.56% % as compared to women who were Primi-gravid; the difference between the status of mother during last pregnancy and awareness about JSSK was not found to be significant statistically Here there, Multi-gravid women who had more than one pregnancy, so during hospitalization, she might be in contacted with JSSK scheme by means anyway.

Discussion:

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In the study conducted by Suman Chatterjee et al (2015) (5) they found that Mean age of the participants was 22.67±6.94 years, and the largest group 25(52.08%) was in of age 20-24 years. In the study conducted by Uvi Tyagi et al (2016) (6), they found that mean age at marriage was 21 years. In the study conducted by Sonali Deshpande et al (2016) (7), they found that there were 61.80% Hindu women while 38.20% were Muslim. In the study conducted by Janmenjoy Mondal et al (2015) (8), they found that most of beneficiary were from general and OBC category (45.37%) followed by 44.39% were belongs to SC category and 10.24% were belongs to ST category.

In the study conducted by A. R. Johnson et al (2015) (9), they found that 44.6% of study participants taken highest education up to high school followed by 24.3% participants taken highest education up to higher secondary school, 12.4% participants taken highest education up to graduation, 9.6% participants taken highest education up to middle school, 5.1% participants taken highest education up to primary school and 4% participants were illiterate. Hetal Koringa (10) in her study found that Out of total 450 women studied, majority i.e.76.67% women were house wives. Only 12.89% were laborers, 7.33% were service class, 2% were involved in agriculture and 1.11% was involved with gainful employment.

Mittal Rathod(11) in her study found that out of 441 husbands of study subjects, 28.57% were illiterate, while 71.43% male were literate.31.74% were educated up to primary level, 29.47% had education up to secondary & higher secondary level and 10.20% were received education up to graduation and above. In the study conducted by Sonali Deshpande et al (2016) (), they found that 61.40% study participants were belonging to socioeconomic class 4 followed by class 5(27.10%) and class 3(11.50%). Ramakant Sharma (12) in his study found that 39.5% of beneficiaries belonged to joint family and 60.5% were nuclear family. Ministry of health and family welfare, Coverage evaluation survey (2009): Gujarat fact sheet showed that 31.3% of the beneficiaries were BPL card holders (13). HireN (14) in his found that Institutional were 89% and home delivery constituted 11% of total sample.

Study on Assessment of Janani Suraksha Yojana conducted by centre for operations research and training (CORT) reported that 81.4 % of deliveries were normal and 18.6% were CS (15). In the study conducted by Kabita Barua et al (2016) (16), they found that 51.6% participants were Multi-gravid while 48.6% were Primi-gravid mothers. In the study conducted by A. R. Johnson et al (2015) (17), they found that the awareness level was nil in this study participants. Regarding the source of information, the most common source of information was from health personnel 201(42.5%), followed by family 132(28.2%) and friends 75 (15.8%), ASHA workers 64 (13.5%). None of the women reported that Radio, TV, Newspaper had contributed as a source of information.

In the study conducted by Rifat Jan et al (2015) (18), they found that that out of 203 study participants, 51.7% of women were provided free ambulance services from home to facility while 48.3% had to use either their own vehicle and Free ambulance service from facility to home was provided to 68.2% of women from facility to home and 31.8% were not provided the service. Out of the 184 women who hired vehicle to / from health institution, money was reimbursed to only 2.8% women. In the study conducted by Uvi Tyagi et al (2016) (6), they found that Mean duration of stay in the hospital for normal delivery and for caesarean sections was 34 hours and 100 hours respectively.

Conclusion: After implementation of JSSK, number of institutional deliveries has significantly increased. This may be due to no charges for normal deliveries, caesarean section, transfer of mother home to health care facilities, primary health facilities to tertiary health facilities, hospital to home. Increase in registered delivery and hence proper antenatal care has direct impact on decreased death rates mainly amongst patient.

References:

1. Basic indicators: health situation in south East Asia. World health organization. South East Asia region: 2004.
2. Guideline for Janani-Shishu Suraksha Karyakram. Maternal Health Division, Ministry of health and family welfare. Government of India, Nirman Bhavan, New Delhi
3. Lwanga

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4. District Level Household and Facility Survey (DLHS-3), 2007-08: India. Gujarat, page no 72.
5. Awareness about Janani Shishu Suraksha Karyakram (JSSK) among pregnant mothers – a community based study in a rural area of West Bengal, India. Dr. Suman Chatterjee, Dr. Debasis Das, Dr. Raju Singh, Dr. Arun Basu, Dr. Arup Chakraborty, Dr. Pramit Ghosh (IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279- 0853, p-ISSN: 2279-0861.Volume 14, Issue 9 Ver. IV (Sep. 2015), PP 01-05, www.iosrjournals.org)
6. Utilization of Services Under Janani Shishu Suraksha Karyakram for Institutional Deliveries in the Public Sector Facilities, Sirmaur District, Himachal Pradesh, India. Uvi Tyagi, Kamaraj Pattabi, Prabhdeep Kaur Indian Journal of Community Medicine/Vol 41/Issue 1/January 2016/p65-68
7. Awareness regarding Janani Shishu Suraksha Karyakram among pregnant women of Marathwada, Maharashtra, India. Sonali Deshpande, Shrinivas Gadappa, Sanjaykumar Pagare, Rashmi Dhaduti, Smita Andurkar (Int J Reprod Contracept Obstet Gynecol. 2016 Jun;5(6):1985-1991)
8. Does Janani Shishu Suraksha Karyakram Ensure Cost-Free Institutional Delivery? A Cross-Sectional Study in Rural Bankura of West Bengal, India. Janmenjoy Mondal, Dipta Kanti Mukhopadhyay, 111 Sujishnu Mukhopadhyay, Apurba Sinhababu (Indian Journal of Public Health, Volume 59, Issue 4, October-December, 2015, p279-285)
9. Awareness of Government Maternity Benefit Schemes among women attending antenatal clinic in a rural hospital in Karnataka, India. A.R.Johnson, B.Rock, N.Catherin, Sr.Berlin, R.Rupini and A.asthuri (ISSN: 2347-3215 Volume 3 Number 1, January-2015, p137- 143, www.ijcrar.com)
10. Dr. Hetal Koringa, "A study on various factors affecting family planning practices among eligible couples in urban slum of municipal corporation area" A Dissertation Submitted to the Saurashtra University for the degree of MD (Branch – VII) (Preventive and Social Medicine) 2015.
11. Dr. Mittal Rathod, "An assessment of health and reproductive profile of women in reproductive age group (15-49 years) in rural area of study district" A Dissertation Submitted to the Saurashtra University for the degree of MD, (Branch – VII) (Preventive and Social Medicine) 2015.
12. Sharma Ramakant: Janani Suraksha Yojana – a study of implementation status in selected districts of Rajasthan (2007-2008).
13. Coverage Evaluation Survey (2009): Gujarat fact sheet Ministry of health and family welfare.
14. Dr. Hiren Solanki, "Evaluation of Janani Suraksha Yojana in our District." A Dissertation Submitted to the Saurashtra University for the degree of MD (Branch – VII) (Preventive and Social Medicine) 2013
15. Assessment of Janani Suraksha Yojana in Himachal Pradesh, Centre for Operations Research and Training: 2007.
16. Factors influencing the utilization of free delivery care under Janani Shishu Suraksha Karyakram in Kamrup district, Assam, India Kabita Barua, Rupali Baruah, Jutika Ojah, Anku Moni Saikia (International Journal of Community Medicine and Public Health, June 2016, Vol 3, Issue 6, p1665-1671)
17. Awareness of Government Maternity Benefit Schemes among women attending antenatal clinic in a rural hospital in Karnataka, India. A.R.Johnson, B.Rock, N.Catherin, Sr.Berlin, R.Rupini and A.asthuri (ISSN: 2347-3215 Volume 3 Number 1, January-2015, p137- 143, www.ijcrar.com)
18. Assessment of Free Referral Services under JSSK in District Ganderbal, Kashmir: A Cross Sectional Study. Rifat Jan, Rafiq Mir, Iftikhar Munshi, S. M. Saleem (J of Evolution of Med and Dent Sci/ eISSN- 2278-4802, pISSN- 2278-4748/ Vol. 4/ Issue 57/ July 16, 2015, Page 9919-9923).

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